Thomas Alley is vice president of Generation at the Electric Power Research Institute (EPRI). In this role his team is responsible for research, development, and the application of technologies for both existing and future fossil generation fleet and large scale renewables such as hydro power, wind generation, and centralized solar.

Leadership
Since 2007 Alley has guided EPRI research that positively impacts a significant portion of America’s non-nuclear central fleet. Alley has led the Generation sector by restructuring the portfolio to meet needs in facility flexibility, reliability, and efficiency.

Before EPRI, Alley directed a nuclear power cross-company initiative: The engineering response to the Alloy 600 issue associated with upper head CRDM tubes, and the engineering and nondestructive evaluation response to the Alloy 600 piping issues. He led industry groups on Alloy 600 inspections and the engineering root cause analysis of Alloy 690 steam generator weld issues. His work at Duke Energy’s welding program led to its restructuring and a continuous improvement process that resulted in a year with no single weld failure.

Professional background
Tom Alley has 35 years of experience in the energy industry.

He joined EPRI in 2007 as senior program manager for major component reliability R&D, and most recently served as director of advanced generation research which includes renewable generation, carbon capture and storage, generation planning, and industry technology demonstrations.

Before joining EPRI, Alley was at Duke Energy, leading a centralized corporate team of metallurgists, engineers, and technical personnel responsible for the evaluation, inspection, and repair of nuclear power plant components. He began his career at Duke Energy as a materials engineer responsible for the metallurgy, inspection, and repair of fossil power plant components.

Education
Alley received a Bachelor of Science degree in electrical engineering and a Bachelor of Science degree in materials engineering from North Carolina State University. He is a registered professional engineer in North Carolina and South Carolina.